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FROM TREXLER ETAL.

Amendments to the Claims:

1. (Currently Amended) A method of forming an interconnect in a substrate which

includes one or more dielectric layers and a copper deposit, said method comprising: forming a

trench in the substrate, said trench having sides; forming a via in the substrate to the copper

deposit, said via having sides; depositing an interconnect liner layer of aluminum-0.5% copper

alloy in the trench and via and along the sides of the trench and via; depositing copper onto the

aluminum-0.5% copper alloy interconnect liner layer; and polishing the copper level with he

interconnect liner layer, wherein the interconnect liner layer is a permanent component of the

interconnect and does not interact with the copper or copper deposit to form an alloy at any time

while the method is performed.

2. (Previously Presented) A method as recited in claim 1, wherein the step of

depositing a layer of aluminum-0.5% copper alloy comprises using a PVD technique.

3. (Currently Amended) A method of forming an interconnect in a substrate which

includes one or more dielectric layers and a copper deposit, said method comprising: form ng a

trench in the substrate, said trench having sides; forming a via in the substrate to the copper

deposit, said via having sides; depositing an intermediate liner layer in the trench and via, along

the sides of the trench and via, and on the copper deposit; depositing an interconnect liner aver

of aluminum-0.5% copper alloy on the intermediate layer; depositing copper onto the aluminum-

0.5% copper alloy; and polishing the copper level with the interconnect liner layer, wherein the

Serial No.: 10/615,042

Art Unit: 2815

Page 2

FROM TREXLER ETAL.

(FRI) 1. 6'06 16:31/ST. 16:29/NO. 4860347725 P 6

interconnect liner layer is a permanent component of the interconnect and does not interac; with

the copper or copper deposit to form an alloy at any time while the method is performed.

(Previously Presented) A method as recited in claim 3, wherein the step of 4.

depositing a layer of aluminum-0.5% copper alloy comprises using a PVD technique.

5. (Original) A method as recited in claim 3, wherein the step of depositing an

intermediate liner layer comprises depositing Ta/TaN.

6. (Currently Amended) An interconnect in a substrate which includes one or more

dielectric layers, said interconnect comprising a first copper deposit, a second copper depc sit, and

an aluminum-0.5% copper alloy interconnect liner disposed between and in contact with the first

and second copper deposits and between the second copper deposit and at least one of the

dielectric layers, wherein the second copper deposit is disposed between two surfaces of the

interconnect liner and is polished level with the interconnect liner, wherein the interconne it liner

is a permanent component of the interconnect and is not combined with either of the copper

deposits to form an alloy.

7. (Previously Presented) An interconnect as recited in claim 6, wherein the

aluminum-copper alloy interconnect liner has been deposited using a PVD technique.

Serial No.: 10/615.042

Art Unit: 2815

Page 3

PAGE 6/10 * RCVD AT 1/6/2006 5:41:06 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/24 * DNIS:2738300 * CSID:1 312 704 8023 * DURATION (mm-ss):03-10

8-14. (Cancelled)

Scrial No.: 10/615,042

Art Unit: 2815

Page 4